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Air Pollution Control Board Members
c/o Jon Trout
Louisville Metro Air Pollution Control District
850 Barret Avenue
Louisville, Kentucky 40204-1745

RE: Comments Regarding STAR Program Draft Regulations and Preliminary Regulatory Impact Assessment

Dear Board Members:

Noveon, Inc. [Noveon] appreciates the opportunity to submit comments regarding the STAR Program Draft Regulations. Noveon participated in the development of and supports fully the comments regarding the proposed STAR Program draft regulations, submitted by Greater Louisville Inc. [GLI], Associated Industries of Kentucky [AIK], and the Louisville Chemistry Partnership [LCP]. Most of their comments are not repeated here. However, please consider their concerns as our concerns. There has not been sufficient time for more than a cursory review of the draft Preliminary Regulatory Impact Assessment [PRIA].

Noveon is fully supportive of scientifically valid, appropriately focused efforts to address air toxics concerns and improve local air quality. We are committed to contributing our part to achieve local air quality goals.

Please consider the following general comments. More specific concerns are presented in the attachment to this letter.

Opportunity Lost:
When the West Louisville Air Toxics Study began, the process also included the development of a Risk Management Plan to deal with the eventuality that some of the chemicals may have elevated risks. That Risk Management Plan was developed in a stakeholder environment. It anticipated the need to determine specific sources of the elevated risks; identify specific, cost effective controls/reductions; and implement them. The process was intended to include all interested parties: industry, residents, and government agency representatives alike. Following this plan could have fostered a sense

of community, built consensus, and developed a regulatory program that all concerned could have supported, even if they didn't agree with every nuance. Instead, LMAPCD choose to develop regulations without any input from affected parties.

The result is a polarized community characterized by distrust and defensive posturing. The use of good science to develop sound, cost effective regulations targeted at specific chemicals was sacrificed in the interest of political concerns. Noveon is disappointed that a program as significant and complicated as the STAR program was not developed through the planned RMP process. Noveon continues to support the concept of a stakeholder process to work through the issues in the draft STAR program as the most effective way to address the community's collective concerns.

Chemicals of Concern:
The WLATS identified 18 chemicals of concern. There is no basis for local regulation of the added 173 chemicals proposed by STAR. Moreover, the proposed de minimis exemptions are inadequate.

Sources of Risk:
The 18 chemicals of concern, also known as the Category 1 chemicals, can be traced back to a variety of sources. While many are used in industry as raw materials, area and mobile sources also contribute significantly to emissions of these chemicals. These include: 1,3-butadiene and benzene from mobile sources; perchloroethylene from dry cleaners; and chromium, and cadmium from burning of coal. In reality, industrial sources contribute a small fraction of overall community risk from emissions of air toxics to the atmosphere. Ironically, industry has been initially targeted as the sole source of emission reductions for the community by the proposed regulations. This approach fails to address the most significant sources of risk while imposing unrealistic requirements on industrial sources. Most importantly, it will result in only limited impact on community health risks.

Determination of Risk:
The proposed regulation requires that a cancer risk of 1 in a million is met at the physical fence line of a regulated source. This is inconsistent with the stated purpose of the STAR program; that is, to reduce the risk to the general population from emissions of air toxics. Sources should not be required to assess risk at locations to which the general public has no access. Doing so necessarily overstates the risk and thereby places an unnecessary burden on industry while providing no improvement in the protection of public health. Noveon supports the evaluation of risk at the census tract centroid.

Economic Considerations:

Cost to the community:

Noveon believes that the implementation of the STAR Program, as proposed, will put such a strain on the District's resources that a construction permit can not be obtained within a reasonable period of time. Currently, the back log of construction permit applications is over a year long. Implementation of the STAR Program will substantially increase the complexity of the review process and, accordingly, its length. This will seriously jeopardize the ability of industry to bring additional capacity to market in a timely fashion. The specter of such delays renders consideration of future expansions in Jefferson County, Kentucky an unattractive option.

Two expansions originally planned for the Noveon Louisville plant will be located elsewhere. These processes have negligible TAC emissions and would likely have fallen below the *de minimus* or Tier I levels because the risk was less than one in a million. Nonetheless, the huge uncertainty surrounding the actual implications of the STAR regulatory package and the probable delays in permitting were instrumental in the decision to not pursue expansion in Louisville. The two expansions would have created between 10 and 20 new jobs and $18 million of investment in a growing business.

Cost to industry:

The PRIA lacks defined cost estimates for the individual proposed regulations or the program as a whole. Therefore it does not meet the requirements of the District's own Regulation 1.08. Neither the cost to industry to implement the requirements, the cost to industry to maintain ongoing compliance with the requirements, nor the benefits to the community through estimated emission reductions associated with those costs have been realistically evaluated. Defensibility of the program simply on the platform that toxic emissions will be reduced by an undetermined amount is not sufficient justification.

Thank you for the consideration of Noveon's comments and concerns during this formal public comment period. If you need clarification regarding any of the comments, please call Susan Clark at 502-772-5705.

Sincerely,

Jeff Campbell
Plant Manager

Attachment 1
Noveon, Inc.
Comments Regarding the Draft STAR Program

Regulation Specific Comments (p*resented in regulation order; not order of importance*):

- **Regulation 1.02**, Section 1.56.6 – Noveon supports GLI's comment regarding the addition of "Use of a material" to the definition of "Process". The effect of considering the use of a material as processing means every time Noveon adds a new chemical it will be a modification under LMAPCD rules. Noveon adds approximately six to ten new raw materials and maintenance chemicals to the facility inventory each year. It is very likely that at least half of these new materials will contain some percentage of TAC greater than 1%. Therefore, Noveon would be forced to apply for a Title V permit modification approximately three to five times each year. This is a drain on both the District's and the company's resources. Noveon is in a highly competitive, global business. In order to remain viable, Noveon must adapt to its customer demands which includes modifying products by the addition of new raw materials to meet specific customer or market demands for new products. In this global economy, market response needs to be made within days or weeks of the development of new products, not years. The inability to respond timely to market demand will mean the loss of market share and, ultimately, of our ability to maintain a viable business in Louisville.

- **Regulation 1.06**, Section 4.2 – Please consider moving the various July 15 deadlines to October 15, beginning with 2006. This will help the environmental community balance the work load through the year. After all, Title V semi-annual reports, Hazardous Waste Annual Generators Reports, and SARA 312 Tier II Reports are due March 1, Emission Inventory and Title V Annual Compliance are due April 15, SARA 313 TRI Reports are due July 1, and Title V semi-annual reports are due August 29. This would reduce the burden on the regulated community if the STAR program reporting was not due within the same time frame.

- **Regulation 1.07** – Noveon objects to the removal of emergencies. The emergency defense is an element of the federal Title V operating program; therefore, the definition of "emergency" and the option for emergency defense should be returned to its current status.

  Reporting malfunctions by calling 911 should suffice without subsequent calls to LMAPCD. In response to this comment during the informal period, the reporting period was extended to two hours. Noveon appreciated this attempt at a compromise; however, it is still inappropriate to require facilities managing an incident to suffer for the District's inability to solve its communications problems with the 911 emergency system. The Metropolitan Sewer District has worked through this issue, since they are notified with a single 911 phone call. LMAPCD should be able to work through it as well.

- **Regulation 1.20**, Section 3.7 – Noveon agrees that an "exit ramp" should be provided to discontinue the requirement for a malfunction prevention program. In addition, an expiration date should be part of the Plan when it is negotiated. This eliminates the need for time consuming reviews that will use valuable staff time, which could otherwise be used for issuing permits. Further, the requirement for public review and comment should be removed throughout Section 3. The District has sufficient expertise and authority to review the technical aspects of the Malfunction Plan. Public review and comment should not be necessary for a locally-enforceable program.
- **Regulation 1.21** - The processes that are already subject to Part 60, 61, or 63 LDAR do not have identical requirements. The various federal leak detection programs have been developed over the years to address particular industries. They are not one size fits all. Examples of areas with differences between the federal programs are written plan requirements; leak identification removal; calibration gas; schedule for monitoring skip periods; valve, pump, connector, agitator, pressure relief device, instrumentation system, compressor, sampling connection system, product accumulator vessels, and control device requirements; and various alternative means. Overlaying the HON on source categories for which it was not intended results in the elimination of certain exemptions from the LDAR Program that are incorporated into the federal program. Those exemption from the federal program were based upon carefully review, as discussed and addressed in the preamble to the federal regulations. Streamlining will not fix this problem, since the most stringent requirement must be chosen. However, eliminating source category specific exemptions will have little value in reducing TAC emissions, since the reason the exemptions exist in the first place is because there are minimal emissions associated with the exempted process/equipment.
- Regulation 1.21 should be revised to incorporate the affected facility-specific federal LDAR program, rather than generically applying the HON, 40 CFR Part 63, Subpart H. This is necessary because the federal LDAR programs are process and organic hazardous air pollutant specific regulations based upon the chemical, concentration, hours of operations and other requirements. Compliance requirements are targeted to components that are capable of emitting significant quantities of organic hazardous pollutants. As proposed by the District, the enhanced LDAR program does not adequately define the scope of the program as it applies to processes or chemicals used at affected sources. As a result, the District's program could conceivably apply to equipment within covered processes that have minimal hours of operation or dilute concentrations of organic hazardous air pollutants even though emissions from such equipment are insignificant.
- The District has misinterpreted the informal comment, "There's a much higher likelihood for compliance to be achieved by simply adjusting (lowering) the leak definitions within the existing applicable federal LDAR programs." The intent is to suggest applying the lowered leak definitions to the exiting applicable federal LDAR program instead of applying the lowered leak definition and requiring all facilities use

the HON program for LDAR. However, it was never the intent to eliminate all of the additional enhanced requirements of the proposed regulation in favor of only applying the lowered leak definition to the existing program.

- Sections 3, 4, 5, and 12: The chemical applicability of the regulation has still not been adequately defined. The unintended consequence of using the term "organic compound" is Regulation 1.21 does not specifically state it applies only to the same regulated substance as the Part 60, 61, or 63 applies. As currently phrased, "organic compound" can be construed to expand the District's LDAR program to all organic compounds, not just the hazardous air pollutant(s) that trigger the federal LDAR program. This needs to be corrected.
- Sections 3.9 and 12 – Noveon supports the option to use a continuous leak monitoring system in lieu of a more prescriptive leak detection program. This would provide added flexibility in achieving the same results. Since EPA was so supportive of this method of leak detection, area monitoring should be made an alternative that does not require District approval.

  Noveon requests the District amend the language in Regulation 1.21 section 3.9 to read as follows:

  > "Federal leak detection and monitoring programs that utilize continuous monitoring of the ambient environment with an alarm system will be accepted as an equivalent alternative to the requirements listed in 3.1 to 3.7. The owner or operator of an affected facility that is not federally required to use continuous monitoring of leaks with and alarm system may propose to the District for approval a leak monitoring program that uses continuous monitoring of leaks with an alarm system that may be used to replace the monitoring requirement of sections 3.1 to 3.7."

  Furthermore, affected facilities, such as Noveon, using continuous monitoring of the ambient environment with an alarm system to detect leaks should not be subject to the third-party audit provisions of Section 12. Monitoring systems of this type detect all leaks without regard to the type of component, the accessibility of the components location, or whether the component appears on an equipment list. The monitoring system will continue to detect leaks and alarm until the leaks are repaired, regardless of whether a paper tag has been placed on the component. Most importantly, continuous monitoring systems by their nature work around the clock, providing a substantially higher frequency and percentage of monitoring than a third-party consultant's biannual visit. Again referring to the Attachment, Noveon's cost per ton of the audit alone is $4,000,000 per ton with no significant environmental benefit. Therefore, the audit program cannot be justified for affected facilities using continuous monitoring of the ambient environment with an alarm system to detect leaks. The suggested text for this provision is as follows:

12.7 Affected facilities using continuous monitoring of the ambient environment with an alarm system to detect leaks in §3.9 are exempt from the provisions of Section 12.

- No economic consideration has been given for the justification of the proposed enhanced Leak Detection and Repair Program. For Regulation 1.21, the PRIA suggests the community will need to add 5 Full Time Equivalents [FTE] to come into compliance with the HON portion of the proposed leak detection and repair program. Noveon believes that two of the five FTEs are anticipated to be needed at our facility, since we are not currently subject to HON leak detection and repair. At the current rate for appropriately qualified employees, this is an estimated cost of $180,000 per year, including benefits. However, our current leak detection program requires continuously monitored emissions through the use of and area monitoring system, which means we are able to identify leaks at the time of occurrence. Consequently, Noveon has very low quantities of fugitive emissions, significantly less than a ton. The cost to implement Regulation 1.21 is approximately $40,000,000 per ton, since there are very limited opportunities for reductions. This cost is presented on a $/ton basis for comparison with alternative methods of emission reduction. (See Attachment 2 for the calculations.) LMAPCD has failed to estimate a cost per ton for emissions reductions resulting from this proposed regulation. Therefore, LMAPCD has not evaluated the benefit of reducing emissions against the cost of implementation to justify the program. The exorbitant cost of LDAR implementation does not justify the miniscule emission reduction.

- Section 9 - The "minor modifications" already considered within EPA Method 21 (such as different calibration gas) should not require LMAPCD approval. In the response to informal comments, the District concurred in 1.21-43. However, the requirement for District approval remains for changes in calibration gases. Again, this should be removed since EPA Method 21 already requires appropriate demonstration of the adequacy of a change. This is of particular to Noveon since our newest direct reading instruments are photo ionization detectors. As such, they cannot even detect methane, which is the District's gas of choice. Yet these instruments come equipped with factory determined factors to convert the reading from the safer, non-flammable calibration gas to many chemicals, including vinyl chloride.

- **Regulation 2.08**, Section 6 – Costs for future years must be defined before this regulation is adopted. In addition, please consider instituting a per facility or per substance cap on fees associated with TACs. It would not be fair for one large source to pay for the bulk of the program. One such example of a cap is already found in Section 1.3.2 for the calculation of Title V emission fees.

- **Regulation 5.01,** Section 1.6 – Noveon appreciates LMAPCDs recognition that *de minimus* criteria are needed to make the STAR program workable. Additional refinements are needed:

- Section 1.6.1 extends the OSHA concentration requirement for a MSDS to the estimation of a TAC based upon a MSDS. This exemption should be extended to apply to process streams as well, so intermediates and wastes are evaluated against the same concentrations.

- Section 1.6.5 exempts surface coating processes for which the potential volatile organic compound emissions are less than 5.0 tons per year. Surface coating operations should not be singled out for preferential treatment. This 5.0 ton exemption should be extended to all types of processes using volatile organic compounds.

- Section 1.7.1 exempts gasoline dispensing facilities that also include cold cleaners subject to Regulation 6.18 so that the cold cleaner emissions do not need to be calculated. Likewise, Section 1.7.4 exempts stationary sources with only cold cleaners. This is reasonable since the small cold cleaners have negligible emissions associated with their operation, whether found at gasoline stations or other facilities. Noveon believes this exemption should be extended to all cold cleaners in Jefferson County. The effort to calculate emissions, determine model parameters and model the impact of a parts washer is not an appropriate use of resources, considering the miniscule amount of emissions they generate during the few hours each year that the lids are open.

- Both quality control and research and development laboratories should be exempted from the STAR program. Laboratories are already exempted from LDAR programs, to the extent recognized by the federal rule. However, this exemption does not carry over into Regulation 5. By their nature, laboratories use many TACs, but their annual usage requirements are negligible compared to a manufacturing facility and they should be exempted.

- **Regulation 5.11 and 5.12** - Noveon believes it is time to incorporate the text of the requirements instead of referring to an out-of-date version of a Kentucky rule.

- **Regulation 5.20**
  - General - Noveon believes the District should determine the Benchmark Ambient Concentrations for each substance listed in Regulation 5.23 and publish them in a table that is part of the regulation (either 5.20 or 5.23). Promulgating the BACs through rule making is necessary to provide and opportunity to comment on the process.

  - Section 2.1.4 - Noveon does not believe the District has the expertise to make decisions on the carcinogenicity of a chemical. Therefore, Section 2.1.3 should be deleted in its entirety.

- Noveon does not recognize other states rules as an authoritative reference for Jefferson County, Kentucky regulations. Only nationally and internationally recognized references should be used. Therefore, the sections regarding Michigan and California factors should be removed.

- Section 4.5: The composite safety factor uses a 30 year estimate for a worker's exposure compared to a 70 year lifetime. However, most people work 40 years (from age ~20 to ~60). Why not use a more appropriate estimate, which would change the composite safety factor to approximately 80? If the factor is considered "standard" what is the reference for that standard?

- Section 5: What are the criteria for the District to make this determination?

Regulation 5.23: It is not reasonable to include ethyl acrylate (EA) in the list of 18 toxic chemicals. The STAR proposal focuses on air quality and potential health effects from chemical exposure to toxic chemicals in the air. EA is not a carcinogenic inhalation hazard and major references such as ACGIH and IRIS do not designate EA as a carcinogen.

By cross-referencing the California list, EA is treated as a carcinogen by STAR. Our understanding is that the California list is largely based upon ground clean-up risks. Of course, we are dealing with inhalation risks, not potential for ground or contaminated water ingestion.

Further, carcinogenic implications for EA appear to arise from research study findings of prestomach carcinoma in rats and mice by gavage. In other words, the few references that list EA as possibly carcinogenic appear to base their categorization on findings of animal ingestion, not animal inhalation and not human inhalation.

Attachment 2
Regulation 1.21

Emission Reduction Costs

Example 1 – LDAR Program cost:

- ★ Noveon estimates the proposed LDAR program will have no emission reduction effect, since they already manage their program with similar leak detection objectives. Assume 10 lb of emissions reductions will be achieved.
- ★ The estimated cost for Noveon to add 2 appropriately qualified Full Time Equivalents to come into compliance with the HON portion of the program is $180,000.
- ★ The estimate for the audit program is $20,000.
- ★ The cost of monitoring equipment purchase and maintenance has not been included, nor has the cost of any data management system.
- ★ Therefore:

$$\frac{\$180{,}000 + \$20{,}000}{10lb} * \frac{2000lb}{ton} = \$40{,}000{,}000 / ton$$

Example 2 – Audit Program cost:

- ★ Noveon estimates the proposed LDAR program will have minimal emission reduction effect, since they already manage their program with similar leak detection objectives. Assume 10 lb of emissions reductions will be achieved.
- ★ The estimate for the audit program is $20,000.
- ★ The cost of a data management system has not been included.
- ★ Therefore:

$$\frac{\$20{,}000}{10lb} * \frac{2000lb}{ton} = \$4{,}000{,}000 / ton$$